What is claimed is:

1. A three-dimensional woven fabric comprising a surface layer having a woven structure, a back layer having a woven structure, and a bonding layer having a woven structure and corrugated in a wave-like shape in the warp direction or weft direction,

the three-dimensional woven fabric being characterized in that a composite yarn composed of two or more constituents, of which one constituent is a polyester multifilament yarn with individual filament size of 0.05-1.5 dtex and comprising 30-150 filaments, is woven as either or both the warp yarn and weft yarn of the surface layer and back layer.

2. A three-dimensional woven fabric according to claim 1, wherein the composite yarn also comprises copolymer polyester multifilament yarn as an additional constituent.

3. A three-dimensional woven fabric according to claim 1, wherein the composite yarn also comprises elastic yarn with a breaking elongation of 70-1000% as an additional constituent.

4. A three-dimensional woven fabric according to claim 3, wherein the elastic yarn is hygroscopic elastic yarn having an equilibrium absorption of 5-40% under conditions of 30°C, 90% RH.

5. A three-dimensional woven fabric according to claim 1, wherein the composite yarn is air intermingled yarn or covering processed yarn.

6. A three-dimensional woven fabric according to claim 1, wherein in the bonding layer corrugated in a wave-like shape, valleys are positioned between the adjacent hills, and the distance d between the adjacent hills is in the range of 2-10 mm.

7. A three-dimensional woven fabric according to any one of claims 1 to 6, wherein the air permeability of the three-dimensional woven fabric is 0-30 $cc/cm^2 \cdot sec$, as the air

permeability measured according to JIS L 1096-1998, 6.27A (Frajour type testing machine method).

8. A three-dimensional woven fabric according to claim 3, wherein the extension percentage of the three-dimensional woven fabric in the warp direction and/or weft direction is 10-80% as the extension percentage measured according to JIS L 1096-1998, 6.14.1B (Constant load test).

9. A process for production of a three-dimensional woven fabric, characterized by weaving a composite yarn composed of two or more constituents, of which one constituent is a polyester multifilament yarn with individual filament size of 0.05-1.5 dtex and comprising 30-150 filaments, as either or both the warp yarn and weft yarn of the surface layer and back layer, wherein the warp yarn used in the surface layer and back layer is high-shrinkage yarn with a higher thermal shrinkage than the warp yarn of the bonding layer, or a conjugated yarn comprising such high-shrinkage yarn, in order to form a triple ply woven fabric composed of a surface layer having a woven structure, a back layer having a woven structure and a bonding layer having a woven structure which bonds the surface layer and back layer, and then subjecting the triple ply woven fabric to wet heat treatment at a temperature of 80-100°C for a period of 1-60 minutes and/or dry heat treatment at a temperature of 140-200°C for a period of 0.1-20 minutes, to produce wave-like corrugation of the bonding layer in the warp direction.

10. A process for production of a three-dimensional woven fabric, characterized by weaving a composite yarn composed of two or more constituents, of which one constituent is a polyester multifilament yarn with individual filament size of 0.05-1.5 dtex and comprising 30-150 filaments, as either or both the warp yarn and weft yarn of the surface layer and back layer, wherein the weft yarn used in the surface layer and back layer is high-shrinkage yarn with a higher thermal shrinkage than the weft yarn of the bonding layer, or a

conjugated yarn comprising such high-shrinkage yarn, in order to form a triple ply woven fabric composed of a surface layer having a woven structure, a back layer having a woven structure and a bonding layer having a woven structure which bonds the surface layer and back layer, and then subjecting the triple ply woven fabric to wet heat treatment at a temperature of 80-100°C for a period of 1-60 minutes and/or dry heat treatment at a temperature of 140-200°C for a period of 0.1-20 minutes, to produce wave-like corrugation of the bonding layer in the weft direction.